

REMARKS

Applicants affirm the election of the Group I claims, 1-13, 25 and 26.

By amendment herein, some minor correction have been made in the specification, and the cross reference to the co-pending application has been updated. No new matter has been added.

This application, as amended herein, contains claims 1-13, 25, 26 and newly added claims 27-37. Claims 14-24 have been canceled without disclaimer or prejudice to being presented in a divisional application. Eleven claims have been canceled (including two independent claims) and eleven claims have been added (including one independent claim) by amendment herein. No additional claim fees are due.

Claims 10 and 11 were rejected as being indefinite. By amendment herein, the language objected to by the Examiner has been deleted from claim 10. The lower end of the thickness range has been deleted from claim 11. It is submitted that claims 10 and 11 are now definite within the meaning of 35 U.S.C. 112, second paragraph.

Claims 1, 5, 6, 7, 8, 9 and 11 were rejected under 35 U.S.C. 102(b) as being anticipated by Goldsmith et al. Claims 1-4, 9, and 11 were rejected under 35 U.S.C. 102(b) as being anticipated by Kelemen et al. Claims 10, 12, 13 and 25 were rejected under 35 U.S.C. 103(a) as being obvious over Kelemen et al. in view of Rueckes et al (921).

By amendment herein, the rejection of claim 1 is now moot. The Applicants thank the Examiner for the indication of allowability of claim 26. The recitations of claims 25 and 26 are now included in claim 1. It is thus submitted that claim 1, and the claims depending from claim 1, are all directed to patentable subject matter.

Newly added independent claim 27 recites a composite asymmetric microfilter structure comprising at least one separation membrane atop a support membrane, the support membrane being formed of silicon. It is submitted that claim 1 is directed to patentable subject matter.

The undersigned has diligently reviewed Goldsmith et al. and Kelemen et al., and has found no teaching or suggestion of the recitations of claims 27 of a support membrane being formed of silicon. As noted in Applicants' specification, in the Summary of the Invention section on pages 7 and 8, there are major advantages to the use of silicon. Good commercial availability, a wide temperature range for processing and use, mechanical toughness, and the broad range of process technology (FEOL/BEOL) used in silicon wafer processing in the microelectronics industry are all available to facilitate the fabrication of a silicon support membrane for use in an asymmetric microfilter structure. The present inventors have, among other things, taught the application of all of this technology to producing an asymmetric microfilter structure.

The undersigned has also diligently reviewed Rueckes et al. (US 6,942,921). There is absolutely no teaching or suggestion in Rueckes et al. of any filter structure, much less an asymmetric microfilter structure.

Rueckes et al. "relates in general to carbon nanotube films, fabrics, layers, and articles and in particular to making electrically conductive articles from carbon nanotube films, fabrics, or layers for a variety of uses in circuits or the like." Not once does the text of Rueckes et al. refer to any sort of filter. Thus, it is respectfully submitted that Rueckes et al. is deficient in at least two respects. Rueckes et al. is not analogous art which may be used against the present claims, as it is in a different field of endeavor. Further, Rueckes et al. does not seek to solve the same problems as the present invention. Finally, Rueckes et al. does not teach or suggest Applicants' invention, whether taken alone or in combination with either of Goldsmith et al or Kelemen et al.

In view of the above remarks with, it is respectfully submitted that claim 27 is directed to patentable subject matter.

The remaining claims depend from one of independent claims 1 or 27. These claims recite further elements, which in combination with the elements of the claim from which they depend, are not shown or suggested in the art of record.

To assist the Examiner, it is noted that newly added claim 28-32 are similar to claims 2-6 and claims newly added claims 33-37 are similar to claims 8-12.

The subject matter of Claim 26, deemed to be allowable by the Examiner, now depends from claim 27 via claim 25. It is thus submitted that claim 26 is immediately allowable.

Claim 10 and newly added claim 35 recite that the support membrane comprises a porous silicon wafer. The advantages of using a support formed of silicon are clearly set forth above in discussing claim 27. Further, the reasons for why the Examiner should not be relying on Rueckes et al. are clearly stated above with respect to claim 27. It is thus submitted that claim 10 and claim 35 are directed to patentable subject matter.

For the same reasons as noted above with respect to claim 27, it is noted the Examiner should not be using Rueckes et al. to reject claims 12, 13 and 25, or newly added claim 37. Further, as noted above, even if such combination is proper, there is nothing in Rueckes et al. to suggest an asymmetric microfilter structure.

For the reasons set forth above with respect to claims 1 and 27 and for the reasons set forth immediately above for the specific claims discussed, it is submitted that the remaining claims are also directed to patentable subject matter.

Conclusion

In view of the allowable nature of the subject matter of all of the claims, if the Examiner cannot issue an immediate allowance, it is respectfully requested that she contact the undersigned to resolve any remaining issues.

Applicants request an extension of time of three months for the filing of this paper. A check in the amount of \$1,020 is enclosed.

Respectfully submitted,

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Date